

NORLITE CORPORATION

628 SO. SARATOGA STREET PO BOX 684 COHOES, NY 12047 PHONE: (518) 235-0401 FAX: (518) 235-0233

May 22, 2012

Mr. William J. Clarke
Regional Permit Administrator
New York State Department of Environmental Conservation
Region 4
1130 North Westcott Road
Schenectady, NY 12306-2014 RETURN RECE

RETURN RECEIPT REQUESTED VIA EMAIL

Mr. Kenneth Eng Air Compliance Branch United States Environmental Protection Agency Region 2 290 Broadway New York, NY 10007-1866 RE

RETURN RECEIPT REQUESTED VIA EMAIL

Re: Norlite Corporation-MACT Excessive Exceedances Report

Kiln 1: 05/01/12 - 05/21/12 Kiln 2: 05/01/12 - 05/21/12

Dear Sirs:

In accordance with 40 CFR 63.1206(c)(3)(vi), the Norlite Corporation (Norlite) is submitting an "Excessive Exceedance Report" for the timeframe of 05/01/12 thru 05/21/12. The attached document explains each of the "malfunctions" for Kilns One & Two.

The results of the investigation concluded a majority of the waste feed cutoffs were a result of the span limit associated with the stack gas flow monitor. Norlite conducted maintenance on Kiln 2, on May 15, 2012; to address several issues included stack gas cutoffs. When the kiln maintenance was complete, the water on the Mist Pad was left on which caused excess water in the system and thus caused water droplets to affect the stack gas probes. The Mist Pad water was turned off which resolved the stack gas cutoff issues.

Norlite is still pursuing the new technology for stack gas flow measurement and are hopefully it will resolve the problems seen with the current stack gas probes. Norlite and its consultant will continue to evaluate each exceedance in order to implement the proper corrective action to further decrease the amount of MACT exceedances.

All of the malfunctions that occurred were consistent with our Startup, Shutdown and Malfunction Plan (SSMP). As approved by the NYSDEC on February 6, 2006, these reports are being sent electronically.

DCL: 2410



NORLITE CORPORATION

Should you have any questions regarding this letter, please contact me at (518) 235-0401 or email at: tvanvranken@norlitecorp.com.

Sincerely,

Thomas Van Vranken

Thomas Van Vranken Environmental Manager

Attachments

ecc: Don Spencer, NYDEC – R4 w/attachments

James Lansing, NYSDEC – CO w/attachments Joe Hadersbeck, NYSDEC – R4 w/attachments



NORLITE CORPORATION MACT EXCEEDANCE REPORT - KILN 1

05/01/12 - 05/21/12

| Start Date | Start Time | End Date | End Time | Downtime | # | Event | Cause | Parameter | Limit | Corrective Action |
|------------|------------|-----------|----------|----------|----|-------------|---|---|-------|--|
| 5/4/2012 | 20:53:18 | 5/4/2012 | 20:53:48 | 0:00:30 | 83 | Malfunction | High LGF Line Pressure Caused Reduced Pump Flow Control Which Caused the Upper Instantaneous Instrument Setpoint to be Reached for LGF Flow Span | LGF Flow | Span | Reduced LGF Line Pressure and Adjusted Pump Flow |
| 5/8/2012 | 8:39:56 | 5/8/2012 | 8:41:17 | 0:01:21 | 84 | Malfunction | High LGF Line Pressure Caused Reduced Pump Flow Control Which Caused the Upper Instantaneous Instrument Setpoint to be Reached for LGF Flow Span | LGF Flow | Span | Reduced LGF Line Pressure and Adjusted Pump Flow |
| 5/13/2012 | 5:03:05 | 5/13/2012 | 5:03:37 | 0:00:32 | 85 | Malfunction | A Sudden Increase In LGF Line Pressure Caused Inconsistent LGF Flows From the Pump Which Caused a Pressure Pulse In the Kilns System Which Effected the Rear Chamber System/At No Time Were Fugitive Emission Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Line Pressure and Pump Flow |
| 5/16/2012 | 5:04:40 | 5/16/2012 | 5:05:51 | 0:01:11 | 86 | Malfunction | High LGF Line Pressure Caused Reduced Pump Flow Control Which Caused the Upper Instantaneous Instrument Setpoint to be Reached for LGF Flow Span | LGF Flow | Span | Reduced LGF Line Pressure and Adjusted Pump Flow |



NORLITE CORPORATION MACT EXCEEDNACE REPORT - KILN 2 05/01/12 - 05/21/12

| Start Date | Start Time | End Date | End Time | Downtime | # | Event | Cause | Parameter | Limit | Corrective Action |
|------------|------------|-----------|-----------------|----------|-----|-------------|---|--|-------|--|
| 5/4/2012 | 14:36:15 | 5/4/2012 | 14:37:40 | 0:01:25 | 219 | Malfunction | The Kiln Pump Was Out of Service So Valving was Used to Control LGF Line Pressure and LGF Flow, a Pressure Spike was Experienced which caused a Pressure Pulse in the Kiln System / No Fugitive Emissions were Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Pump Pressure to Allow Finer Adjustments at the Kilns |
| 5/4/2012 | 19:30:09 | 5/4/2012 | 19:31:09 | 0:01:00 | 220 | Malfunction | The Kiln Pump Was Out of Service So Valving was Used to Control LGF Line Pressure and LGF Flow, a Pressure Spike was Experienced which caused a Pressure Pulse in the Kiln System / No Fugitive Emissions were Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Pump Pressure to Allow Finer Adjustments at the Kilns |
| 5/6/2012 | 1:24:03 | 5/6/2012 | 1:28:52 | 0:04:49 | 221 | Malfunction | The Kiln Pump Was Out of Service So Valving was Used to Control LGF Line Pressure and LGF Flow, a Pressure Spike was Experienced which caused a Surge in LGF Flow | LGF Flow | Span | Adjusted LGF Line Pressure and Fuel Flow |
| 5/6/2012 | 4:29:47 | 5/6/2012 | 4:32:46 | 0:02:59 | 222 | Malfunction | The Kiln Pump Was Out of Service So Valving was Used to Control LGF Line Pressure and LGF Flow, a Pressure Spike was Experienced which caused a Surge in LGF Flow | LGF Flow | Span | Adjusted LGF Line Pressure and Fuel Flow |
| 5/6/2012 | 22:53:22 | 5/6/2012 | 22:54:06 | 0:00:44 | 223 | Malfunction | The Kiln Pump Was Out of Service So Valving was Used to Control LGF Line Pressure and LGF Flow, a Pressure Spike was Experienced which caused a Surge in LGF Flow | LGF Flow | Span | Adjusted LGF Line Pressure and Fuel Flow |
| 5/9/2012 | 13:10:39 | 5/9/2012 | 13:13:47 | 0:03:08 | 224 | Malfunction | The Kiln Pump Was Out of Service So Valving was Used to Control LGF Line Pressure and LGF Flow, a Pressure Spike was Experienced which caused a Surge in LGF Flow | LGF Flow | Span | Adjusted LGF Line Pressure and Fuel Flow |
| 5/9/2012 | 13:14:07 | 5/9/2012 | 13:14:54 | 0:00:47 | 225 | Malfunction | The Kiln Pump Was Out of Service So Valving was Used to Control LGF Line Pressure and LGF Flow, a Pressure Spike was Experienced which caused a Pressure Pulse in the Kiln System / No Fugitive Emissions were Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Pump Pressure to Allow Finer Adjustments at the Kilns |
| 5/10/2012 | 3:10:01 | 5/10/2012 | 3:10:42 | 0:00:41 | 226 | Malfunction | A Sudden Increase In LGF Line Pressure Caused Inconsistent LGF Flows From the Pump Which Caused a Pressure Pulse In the Kilns System Which Effected the Rear Chamber System/At No Time Were Fugitive Emission Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Pump Pressure to Allow Finer Adjustments at the Kilns |

| 5/10/2012 | 3:11:05 | 5/10/2012 | 3:12:09 | 0:01:04 | 227 | Malfunction | A Sudden Increase In LGF Line Pressure Caused Inconsistent LGF Flows From the Pump Which Caused a Pressure Pulse In the Kilns System Which Effected the Rear Chamber System/At No Time Were Fugitive Emission Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Line Pressure and Pump Flow |
|-----------|----------|-----------|----------|---------|-----|-------------|---|--|------|--|
| 5/14/2012 | 0:39:55 | 5/14/2012 | 0:40:30 | 0:00:35 | 228 | Malfunction | A Sudden Increase In LGF Line Pressure Caused Inconsistent LGF Flows From the Pump Which Caused a Pressure Pulse In the Kilns System Which Effected the Rear Chamber System/At No Time Were Fugitive Emission Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Line Pressure and Pump Flow |
| 5/14/2012 | 0:53:08 | 5/14/2012 | 0:53:45 | 0:00:37 | 229 | Malfunction | A Sudden Increase In LGF Line Pressure Caused Inconsistent LGF Flows From the Pump Which Caused a Pressure Pulse In the Kilns System Which Effected the Rear Chamber System/At No Time Were Fugitive Emission Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Line Pressure and Pump Flow |
| 5/14/2012 | 0:53:49 | 5/14/2012 | 0:54:39 | 0:00:50 | 230 | Malfunction | A Sudden Increase In LGF Line Pressure Caused Inconsistent LGF Flows From the Pump Which Caused a Pressure Pulse In the Kilns System Which Effected the Rear Chamber System/At No Time Were Fugitive Emission Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Line Pressure and Pump Flow |
| 5/14/2012 | 1:01:43 | 5/14/2012 | 1:02:37 | 0:00:54 | 231 | Malfunction | A Sudden Increase In LGF Line Pressure Caused Inconsistent LGF Flows From the Pump Which Caused a Pressure Pulse In the Kilns System Which Effected the Rear Chamber System/At No Time Were Fugitive Emission Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Line Pressure and Pump Flow |
| 5/14/2012 | 15:21:33 | 5/14/2012 | 16:24:54 | 1:03:21 | 232 | Malfunction | Instantaneous Upper Instrument Setpoint Reached for LGF Flow Span/Filter Baskets Plugged/High CO's | LGF Flow | Span | Cleaned Filter Baskets/Adjust Fuel Flow |
| 5/15/2012 | 1:17:04 | 5/15/2012 | 1:31:05 | 0:14:01 | 233 | Malfunction | Instantaneous Upper Instrument Setpoint Reached for LGF Flow Span/LGF Pump Stopped | LGF Flow | Span | Restarted LGF Pump |
| 5/15/2012 | 2:01:21 | 5/15/2012 | 2:01:52 | 0:00:31 | 234 | Malfunction | A Sudden Increase In LGF Line Pressure Caused Inconsistent LGF Flows From the Pump Which Caused a Pressure Pulse In the Kilns System Which Effected the Rear Chamber System/At No Time Were Fugitive Emission Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Line Pressure and Pump Flow |
| 5/15/2012 | 2:01:21 | 5/15/2012 | 2:01:52 | 0:00:31 | 235 | Malfunction | A Sudden Increase In LGF Line Pressure Caused Inconsistent LGF Flows From the Pump Which Caused a Pressure Pulse In the Kilns System Which Effected the Rear Chamber System/At No Time Were Fugitive Emission Witnessed | Back Chamber Pressure, 1 Second Delay | Opl | Adjusted LGF Line Pressure and Pump Flow |
| 5/15/2012 | 15:47:26 | 5/15/2012 | 16:08:25 | 0:20:59 | 236 | Malfunction | Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span / I & E Cleaned Probe | Stack Gas Flow Rate | Span | I & E Cleaned Probe |
| 5/19/2012 | 23:08:34 | 5/19/2012 | 23:12:56 | 0:04:22 | 237 | Malfunction | Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |

| 5/19/2012 | 23:28:53 | 5/20/2012 | 0:18:54 | 0:50:00 | 238 | Malfunction | Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span / I & E Cleaned Probe | Stack Gas Flow Rate | Span | I & E Cleaned Probe |
|-----------|----------|-----------|---------|---------|-----|-------------|--|---------------------|------|---------------------------|
| 5/20/2012 | 1:01:37 | 5/20/2012 | 1:06:45 | 0:05:08 | 239 | Malfunction | Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
| 5/20/2012 | 1:11:55 | 5/20/2012 | 1:31:16 | 0:19:21 | 240 | Malfunction | Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
| | | | | | 241 | Malfunction | Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
| 5/20/2012 | 3:03:53 | 5/20/2012 | 3:28:02 | 0:24:09 | | | Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas | | · | |
| 5/20/2012 | 3:34:52 | 5/20/2012 | 4:07:17 | 0:32:25 | 242 | Malfunction | Span Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
| 5/20/2012 | 6:35:59 | 5/20/2012 | 6:36:21 | 0:00:22 | 243 | Malfunction | Span Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
| 5/20/2012 | 9:08:42 | 5/20/2012 | 9:26:13 | 0:17:31 | 244 | Malfunction | Upper Instrument Setpoint Reached for Stack Gas Span Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
| 5/21/2012 | 0:23:32 | 5/21/2012 | 0:23:56 | 0:00:24 | 245 | Malfunction | Upper Instrument Setpoint Reached for Stack Gas Span Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
| 5/21/2012 | 0:42:59 | 5/21/2012 | 0:45:07 | 0:02:08 | 246 | Malfunction | Upper Instrument Setpoint Reached for Stack Gas Span Mist Pad Water Flow Was Left On After the Kiln | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
| 5/21/2012 | 1:37:30 | 5/21/2012 | 1:44:24 | 0:06:54 | 247 | Malfunction | Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span Mist Red Water Flow Was Left On Affect the Kills | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
| 5/21/2012 | 1:57:36 | 5/21/2012 | 1:58:00 | 0:00:24 | 248 | Malfunction | Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
| 5/21/2012 | 3:21:48 | 5/21/2012 | 3:22:41 | 0:00:53 | 249 | Malfunction | Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
| E/04/0040 | 4.40.04 | E/04/2042 | 4.40.45 | 0.00.04 | 050 | Malforentia | Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas | Stock Coo Flam Barr | Cr | Turned Off Mint Pad Water |
| 5/21/2012 | 4:16:24 | 5/21/2012 | 4:16:45 | 0:00:21 | 250 | Malfunction | Span | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |

| 5/21/2012 | 4:51:41 | 5/21/2012 | 4:52:36 | 0:00:55 | 251 | Malfunction | Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas Span | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |
|-----------|---------|-----------|---------|---------|-----|-------------|--|---------------------|------|---------------------------|
| | | | | | | | Mist Pad Water Flow Was Left On After the Kiln Startup Occurred Which Caused the Instantaneous Upper Instrument Setpoint Reached for Stack Gas | | · | |
| 5/21/2012 | 5:07:00 | 5/21/2012 | 5:07:25 | 0:00:25 | 252 | Malfunction | Span | Stack Gas Flow Rate | Span | Turned Off Mist Pad Water |